

FIGURE 1

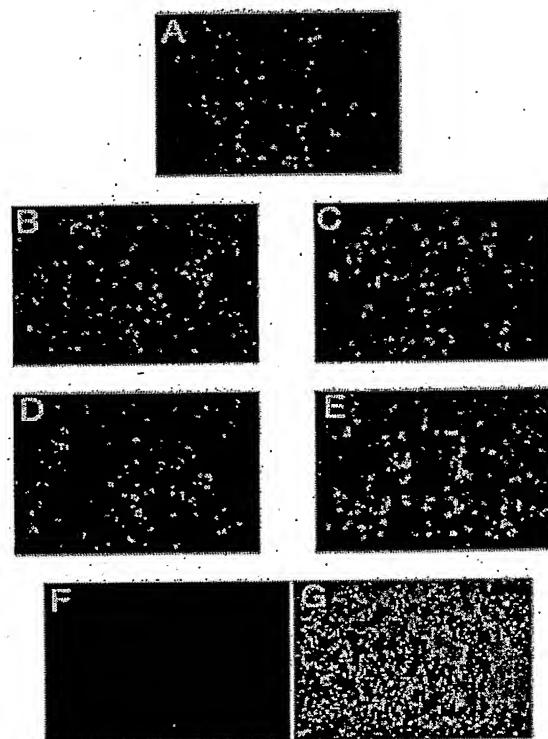


FIGURE 2

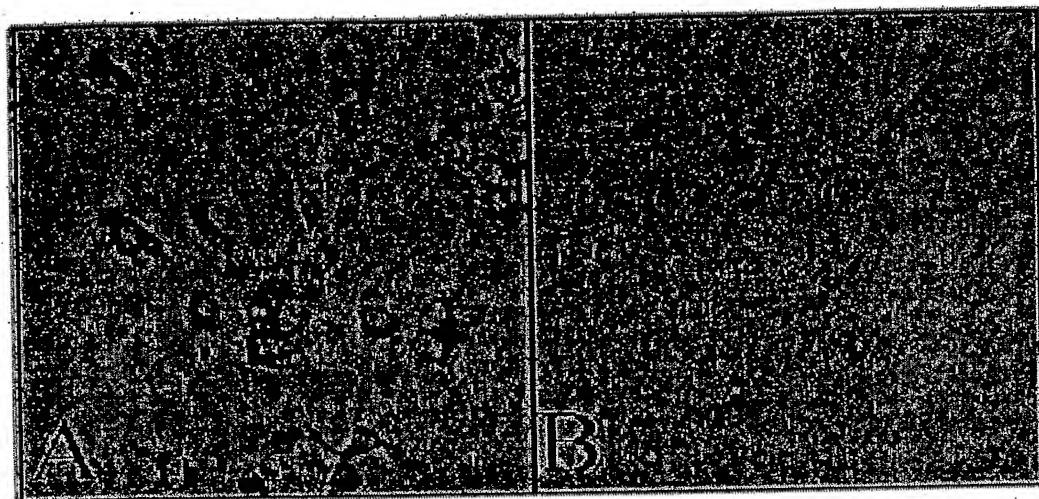


FIGURE 3

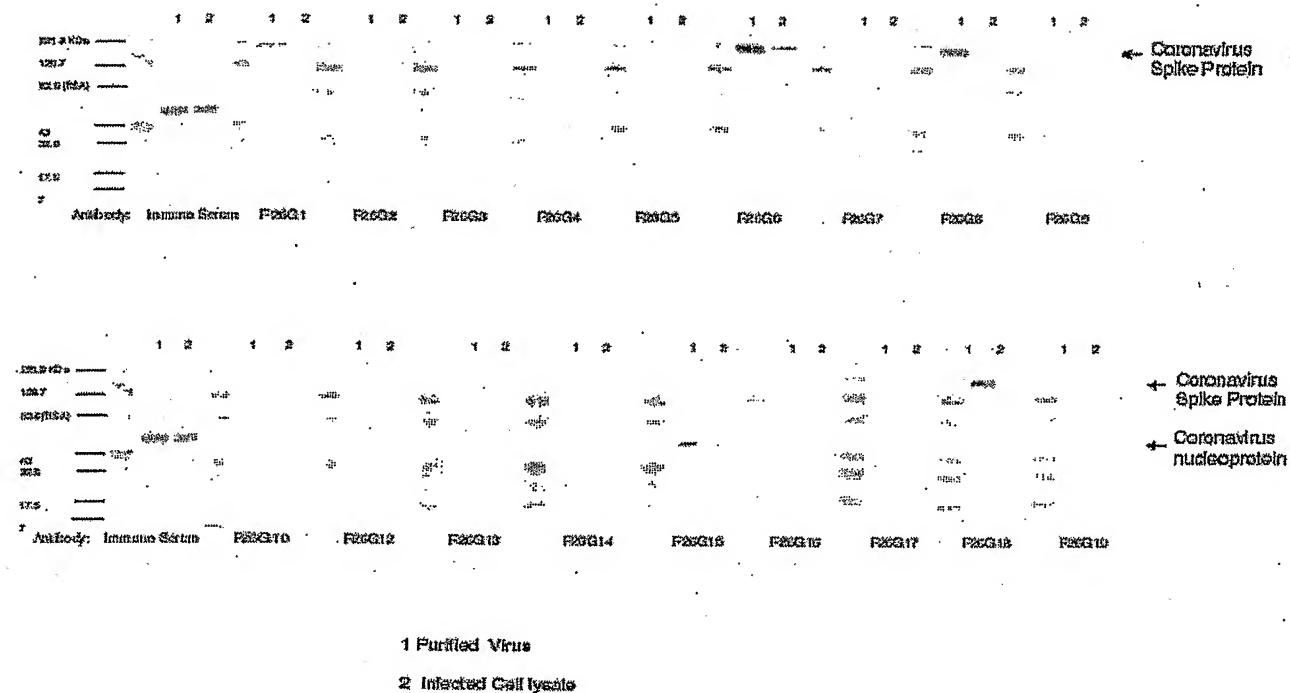


FIGURE 4

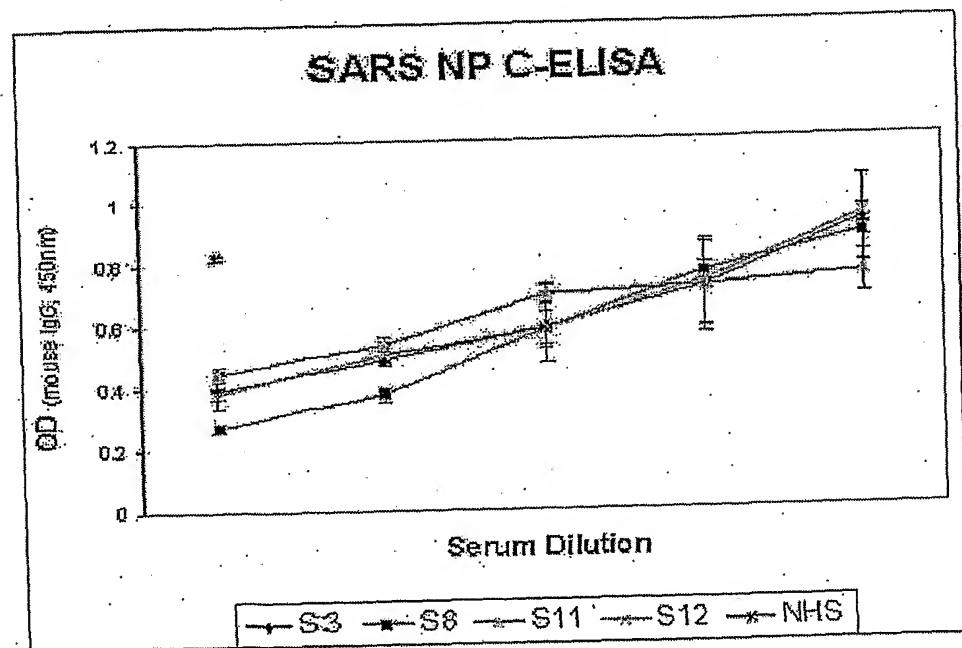
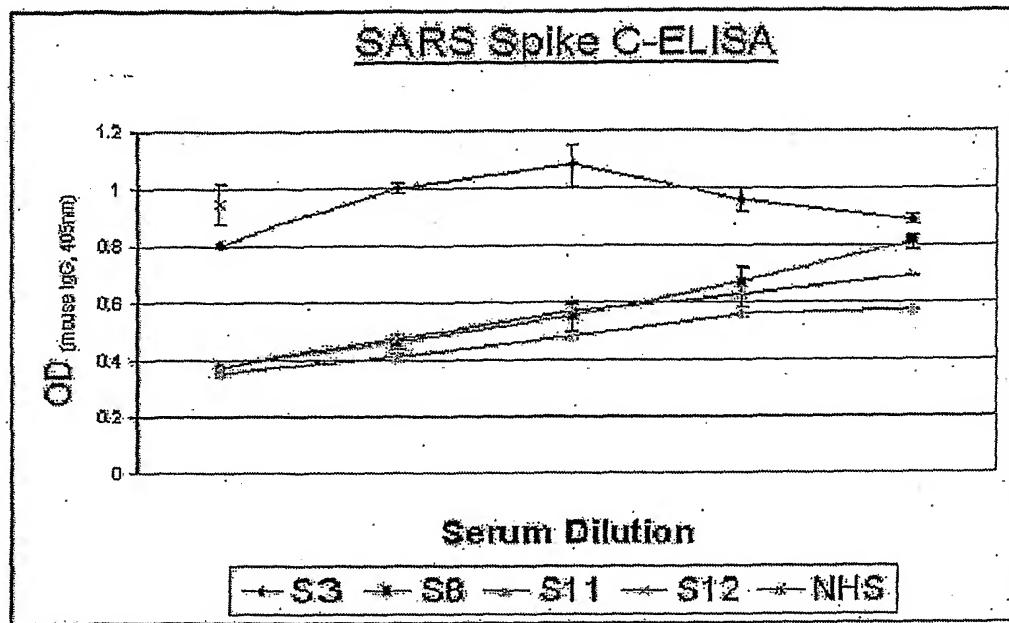


FIGURE 5

SARS CoV mAb V_L alignment

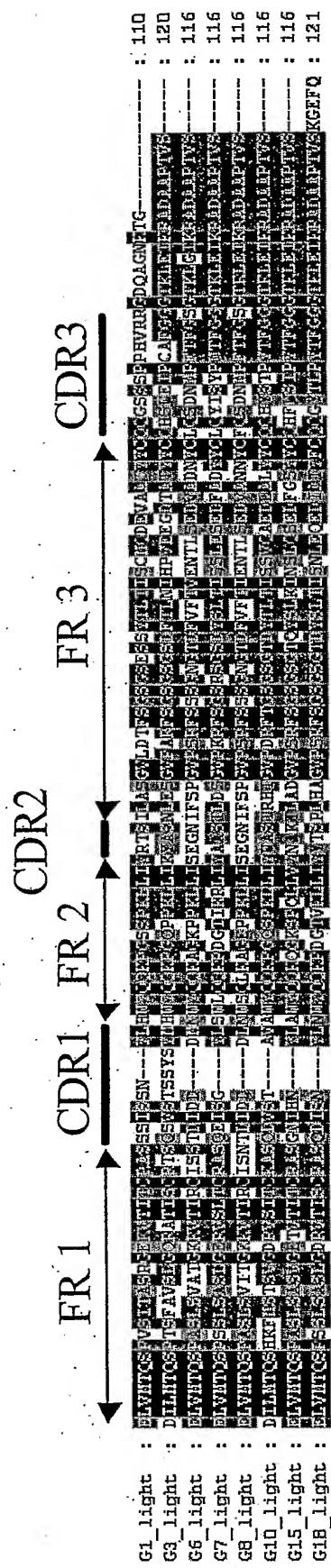


FIGURE 6A

SARS CoV mAb V_H alignment

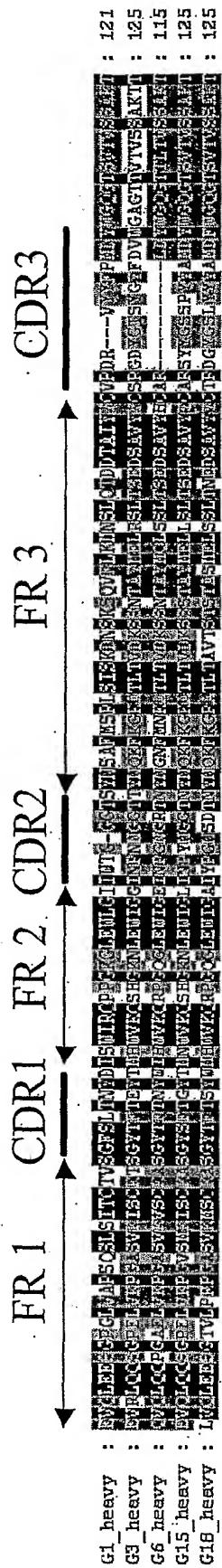


FIGURE 6 B

SARS-specific monoclonal antibodies, Heavy chains (VH), amino acid sequences

F26G3-VH

EVRLQQSGPELVKPGASVKISCKTSGYTFTEYTMHWVKQSHGKNLEWIGGINPNNGGTTYNQKFKG
KATLTVDKSSNTAYMELRSLTSEDSAVYYCSRGDYGTSGYFDVWGAGTTVTVSSAKTTAPSVYPL
A

F26G7-VH

VELLESGTVLARPGASVKMSCEASGYTFTTYWMHWIKQRPGQGLEWIGAIYPGNSDTTYNQKFKGK
AKLTAVTSTSTAYMELSSLTNEDSAVYYCTREGIPQLLRTMDYWGQGTSVTVSSAKTTPPSV

F26G9-VH

VQLLESGTVLARPGASVKMSCKASGYSFTSYWMHWVKQRPGQGLEWIGAIYPGNSDTSYNQKFKGK
AKLTAVTSASTAYMELSSLTNEDSAVYYCTRSVYYGYGYFDVWGAGTTVTVSSAKTTPPSV

F26G10-VH

EVQLEESGTVLARPGASVKMSCKASGYSFTSYWMHWVKQRPGQGLDWIGAIYPENSDTSYNQKFKG
KAKLTAVTSASTAYMEHSSLTNEDSAVYYCTRSVYYGYGYFDVWGAGTTVTVSSAKTTAPSVYPLA
PVCGDTTGSSVTLGCLVKGYFPEPVTLWNSGSLSSGVHTFPAVLQSDLYTLSSVTVTSSTWPSQ
SITCNVAHPASSTKVDKIEPRVPTSQN

F26G18-VH

LVQLEESGTVLPRPGASVKMSCKASGYTFTSYWMHWVKQRPGQGLEWIGAIYPGNSDTNYNQKFKG
RATLTAVTSTSTASMEMLSSLTNEDSAVYYCTRDGYGSLYYYAMDFWGQGTSVTVSSAKTTAPSVK

F26G19-VH

EVQLEESGTVLARPGASVKMSCKASGYTFTTYRMHWIKQRPGQGLEWIGAIYPGNSDTTYNQKFKD
KAKLTAVTSTSSAYMELSSLTNEDSAVYFCTREGIPQLLRTLDYWGQGTSVTVSSAKTTAPSVYPL
A

F26G1-VH

EVQLEESGPGLVAPSQSLSITCTVSGFSLTNYDISWIRQPPGKGLEWLGIWTGGGTSYNSAFMSR
LSISKDNSKSQVFLKMNSLQTDDTAIYYCVRDRVYYFPMDYWGQGTSVTVSSAKTTAPSVYPLA

F26G6-VH

MEWSWVFLFLVATATDVHSQVQLQQPGAEIWKPGASVKVSCKASGYTFTNYWIHWVKQRPGQGLEW
IGEINPGNGRTNYNNGNFMNKATLTVDKSSNTAYMQLSSLTSEDSAVYHCARLDYWGQGTTLTVSSA
KTTPPSV

F26G8-VH

VQLLESGAELVKPGASVKVSCKASGYTFTSYWIHWVKQRPGQGLEWIGEINPSNGRTNYNNGNFESK
ATLTVDKSSNTAYMHLSSLTYEDSAVYHCTRLDYWGQGTTLTVSSAKTTAPSVYPLA

Neutralizing mAbs are in **bold text**.

FIGURE 7

SARS-specific monoclonal antibodies, Light chains (VL), amino acid sequences

F26G3-VL

DILMTQSPTSFAVSLGQRATISCRTSQSVSTSSYSYMHWYQQKPGQPPKLLIKYASNLESGVPARF
SGSGSGSDFTLNIHPVEEGDTATYYCQHSWEIPCAFGGGTKLEIKRADAAPTVS

F26G7-VL

ELVMTQSPSSLSASLGERVSLTCRASQEISGYLSWLQQKPDGTIKRLIYAASTLDSGVPKRFSGSR
SGSDYSLTISSEDFADYYCLQYISYPWTFGGGTKLEIKRADAAPTVS

F26G9-VL

DILMTQSHKCMSTSVGDRVSITCKASQDVSTAVVWYQQKPGQPKLLIYWASTRHTGVPDFTGSG
SGTDYTLTISSVQAEDLALYYCQQHYTPYTFGGGTKLEIKRADAAPTVS

F26G10-VL

DILMTQSHKFMSTSVGDRVSITCKASQDVSTAVAWYQQKPGQSPKLLIYWASTRHTGVPDFTGSG
SGTDYTLTISSVQAEDLALYYCQQHYSTPYTFGGGTKLEIKRADAAPTVS

F26G18-VL

ELVMTQSPSSLSASLGDRVТИSCRASQDISNYLNWYQQKPDGTVKLLIYTSRLHAGVPSRFSGSG
SGTDYSLTISNLEQEDIATYFCQQGYTLPYTFGGGTKLEIKRADAAPTVSKGEFQHTGGRY

F26G19-VL

DILMTQSPSSLSASLGERVSLTCRASQEISGYLSWLQEKPDKTIKRLIYAASTLDSGVPKRFSGSR
SGSDYSLTISSEDFADYYCLQYVSYPWTFGGGTKLEIKRADAAPTV

F26G1-VL

ELVMTQSPVSIASRGEKVTITCRASSSISSNYLHWYQQKPGSPKLLIYRTSILASGVLDTFSGS
GSESSYTLTISCMQDEVAATYYCQQGSSSPHVRGGDQAGNKTG

F26G6-VL

ELVMTQSPASLSVATGKVTIRCISSNTDIDDDMNWYQQKAGKPPKLLISEGNIFSPGVPSRFSSSG
NGTDFVFTVENTLSEDVADNYCLQSDNMPFTFGSGTKLGIKRADAAPTVS

F26G8-VL

ELVMTQSPASLSVITGKVTIRCISSNTDIDDDLNWSQLKAGEPPKLLISEGNIFSPGVPSRFSSSG
NGTDFVFTIENTLSEDVANNYCFQSDNMPFTFGSGTKLEIKRADAAPTVS

Neutralizing mAbs are in **bold text**.

FIGURE 8

SARS-specific monoclonal antibodies, Heavy chains (VH), nucleotide sequences

F26G3-VH

ATGGAATGGAGCTGGGTCTTCTCTCTCTGTCAAGGAACGTGCAGGTGTCCTCTGAGGTCCGG
 CTGCAACAGTCTGGACCTGAACACTGGTGAAGCCTGGGGCTTCAGTGAAGATATCCTGCAAGACTCT
 GGATACACATTCACTGAATAACACCATGCACTGGGTGAAGCAGAGCCATGGAAAGAACCTTGAGTGG
 ATTGGAGGTATTAATCCTAATAATGGTGGTACTACCTACAACCAGAAGTTAAGGGCAAGGCCACA
 TTGACTGTAGACAAGTCCTCAACACAGCCTACATGGAGCTCCGCAGCCTGACATCTGAGGATTCT
 GCAGTCTATTATTGTTCAAGAGGGACTACGGTACTAGCTACGGTACTTCGATGTCGGGCGCA
 GGGACCACGGTCACCGTCTCCTCAGCCAAAACAACAGCCCCATCGGTCTATCCACTGGCCA

F26G7-VH

GTGGAGCTGCTCGAGTCAGGGACTGTGCTGGCAAGGCCTGGGGCTTCAGTGAAGATGTCCTGCGAG
 GCTTCTGGCTACACCTTACCACTACTGGATGCACTGGATAAAACAGAGGCCCTGGACAGGGTCTG
 GAATGGATTGGCCTATTATCCTGGAAATAGTGAATACCTACAACCAGAAGTTCAAGGGCAAG
 GCCAAACTGACTGCAGTCACATCCACCAGCAGTGCCTACATGGAGCTCAGCAGCCTGACAAATGAG
 GACTCTGCGGTCTATTACTGTACAAGAGAGGGAAATTCCCCAATTACTTCGACTATGGACTACTGG
 GGTCAAGGGACCTCAGTCACCGTCTCCTCAGCCAAAACAACACCCCCATCGGTCA

F26G9-VH

GTCCAGCTGCTCGAGTCAGGGACTGTGCTGGCAAGGCCTGGGGCTTCAGTGAAGATGTCCTGCAAG
 GCTTCTGGCTACAGCTTACCACTACTGGATGCACTGGTAAACAGAGGCCCTGGACAGGGTCTA
 GAATGGATTGGCCTATTATCCTGGAAATAGTGAATACCTACAACCAGAAGTTCAAGGGCAAG
 GCCAAACTGACTGCAGTCACATCCGCCAGTACTGCCTACATGGAGCTCAGCAGCCTGACAAATGAG
 GACTCTGCGGTCTATTACTGTACAAGATCCGTTACTACGGCTACGGTACTTCGATGTCGGGCG
 GCAGGGACCACGGTCACCGTCTCCTCAGCCAAAACAACACCCCCATCGGTCA

F26G10-VH

GAGGTGCAGCTGGAGGAGTCTGGGACTGTGCTGGCAAGGCCTGGGGCTTCAGTGAAGATGTCCTGC
 AAGGCTTCTGGCTACAGCTTACCACTACTGGATGCACTGGTAAACAGAGGCCCTGGACAGGGT
 CTAGATTGGATTGGCCTATTATCCTGGAAATAGTGAATACCTACAACCAGAAGTTCAAGGGC
 AAGGCCAAACTGACTGCAGTCACATCCGCCAGCAGTGCCTACATGGAGCACAGCAGCCTGACAAAT
 GAGGACTCTGCGGTCTATTACTGTACAAGATCCGTTACTACGGCTACGGTACTTCGATGTCGG
 GGCAGGGACCACGGTCACCGTCTCCTCAGCCAAACAGACAGCCCCATCGGTCTATCCACTGGCC
 CCTGTGTGTGGAGATAACACTGGCTCCTCGGTGACTCTAGGATGCTGGTCAAGGGTTATTCCCT
 GAGCCAGTGACCTTGACTGGAAACTCTGGATCCCTGTCCAGTGGCTACGCTCAGTGA
 CTGCAAGTCTGACCTCTACACCCCTCAGCAGTCAGTGA
 CTGTAACCTCGAGCACCTGGCCAG
 TCCATCACCTGCAATGTGGCCACCCGGCAAGCAGCACCAAGTGGACAAGAAAATTGAGCCCAGA
 GTGCCCACTAGTCAGAAC

F26G18-VH

TTGGTGCAGCTGGAGGAGTCTGGGACTGTGTTGCCAAGGCCTGGGGCTTCAGTGAAGATGTCCTGC
 AAGGCTTCTGGCTACACCTTACCACTACTGGATGCACTGGTAAACAGAGGCCCTGGACAGGGT
 CTGGAAATGGATTGGCCTATTATCCTGGAAATAGTGAATACCTACAACCAGAAGTTCAAGGGC
 AGGGCCACACTGACTGCAGTCACATCCACCAGCACAGTGCCTCCATGGAGCTCAGCAGCCTGACAAAT
 GAGGACTCTGCGGTCTATTACTGTACAAGAGACGGCTATGGTAGCCTTATTACTATGCTATGGAC
 TTCTGGGGTCAAGGAACCTCAGTCACCGTCTCCTCAGCCAAAACAACAGCCCCATCGGTCAAGGGC
 GA

FIGURE 9 -1

F26G19-VH

GAGGTGCAGCTGGAGGAGTCTGGACTGTGCTGGCAAGGCCTGGGCTTCAGTGAAGATGTCCCTGC
 AAGGCTTCTGGCTACACCTTACACCCTACCGGATGCACTGGATAAAACAGAGGCCTGGACAGGGT
 CTGGAATGGATTGGCGCTATTATCCTGGAAATAGTGATACTACCTACAACCAGAAGTTCAAGGAC
 AAGGCCAAACTGACTGCAGTCACATCCACCAAGCTGCCTACATGGAGCTCAGCAGCCTGACAAAT
 GAGGACTCTGCGGTCTATTCTGTACAAGAGAGGAACTCCCAATTACTTCGGACTTGGACTAC
 TGGGTCAAGGAACCTCAGTCACCGTCTCCTCAGCCAAAACAACAGCCCCATCGGTCTATCCACTG
 GCC

F26G1-VH

TGAGGTGCAGCTGGAGGAGTCAGGACCTGGCCTGGTGGCGCCCTCACAGAGCCTGTCCATTACCTG
 CACTGTCTCTGGGTTCTCATTAACGAACATGATATAAGCTGGATTGCCAGCCACCAGGAAAGGG
 TCTGGAGTGGCTTGGAAATAATATGGACTGGTGGAGGCACAAGTATAATTCAAGCTTCATGTCCAG
 ACTGAGCATCAGCAAGGACAACCCAAGAGCCAAGTTCTAAAAATGAACAGTCTGCAAACGTGA
 TGACACAGCCATATAATTACTGTGTAAGAGATAGGGTCTACTACTCCCTATGGACTACTGGGTCA
 AGGAACCTCAGTCACCGTCTCCTCAGCCAAAACAACAGCCCCATCGGTCTATCCACTGGCCA

F26G6-VH

ATGGAATGGAGCTGGGTCTTTCTCTTTGGTAGCAACAGCTACAGATGTCCACTCCCAGGTCAA
 CTGCAGCAGCCTGGGCTGAACGGTGAAGCCTGGGCTTCAGTGAAAGTGTCCCTGCAAGGCTTCT
 GGCTACACCTTCACCAACTACTGGATACACTGGTGAAGCAGAGGCCTGGACAGGGCCTTGAGTGG
 ATTGGAGAGATTAATCCTGGCAACGGTCGTACTAACTATAATGGAACTTCATGAACAAGGCCACA
 CTGACTGTAGACAAATCCTCCAACACAGCCTACATGCAACTCAGCAGCCTGACATCTGAGGACTCT
 GCGGTCTATCAGTGTCAAGATTAGACTACTGGGCCAAGGCACCACTCTCACAGTCTCAGCC
 AAAACAACACCCCCATCGGT

F26G8-VH

GTCCAGCTCGAGTCTGGGCTGAACGGTGAAGCCTGGGCTTCAGTGAAAGTGTCCCTGCAAG
 GCTTCTGGCTACACCTCACCAGCTACTGGATACACTGGTGAAGCAGAGGCCTGGACAGGGCCTT
 GAGTGGATTGGAGAGATTAATCCTAGCAACGGTCGTACTAACTATAATGGAACTTCGAGAGCAAG
 GCCACACTGACTGTAGACAAATCCTCCAACACAGCCTACATGCACCTCAGCAGCCTGACATATGAG
 GACTCTGCGGTCTATCACTGTACAAGATTAGACTACTGGGCCAAGGCACCACTCTCACAGTCTCC
 TCAGCCAAAACAACAGCCCCATCGGTCTATCCACTGGCC

Neutralizing mAbs are in **bold text**.

FIGURE 9-2

SARS-specific monoclonal antibodies, Light chains (VL), nucleotide sequences

F26G3-VL

GGGCCAGCCGGCGAGCTGACATTCTGATGACCCAGTCTCCTACTTCCTTGCTGTATCTCTGG
 GGCAGAGGGCCACCATCTCATGCAGGACCAGCCAAAGTGTCAAGTACATCTAGCTATAGTTATATGC
 ACTGGTACCAACAGAAACCAGGACAGCCACCCAAACTCCTCATCAAGTATGCATCCAACCTAGAAAT
 CTGGGGTCCCTGCCAGGTTCACTGGCAGTGGTCTGGGTCAAGACTTCACCCCTAACATCCATCCTG
 TGGAGGAGGGGAGATCTGCAACATATTACTGTCAGCACAGTTGGGAGATTCCGTGCGCGTTCGGAG
 GGGGGACCAAGCTGAAATAAACGGGCTGATGCTGCACCAACTGTATCC

F26G7-VL

GTGCCAGATGTGAGCTCGTGATGACCCAGTCTCCATCCTCCTTATCTGCCCTCTGGGAGAAAGAG
 TCAGTCTCACTTGTGGCAAGTCAGGAAATTAGTGGTTATTTAAGCTGGCTTCAGCAGAAACCAG
 ATGGAACATTAAACGCCTGATCTACGCCGATCCACTTAAAGTGGTCTGGCCAAAAGGTTCA
 GTGGCAGTAGGTCTGGGTCAAGATTATTCTCTCACCATCAGCAGCCTTGAGTCTGAAGATTTCAG
 ACTATTACTGTCTACAATATATTAGTTATCCGTGGACGTTGGAGGTAACAGCTGAAATCA
 AACGGGCTGATGCTGCACCAACTGTATCC

F26G9-VL

GACATTCTGATGACCCAGTCTCACAAATGCATGTCCACATCAGTAGGAGACAGGGTCAGCATCACC
 TGCAAGGCCAGTCAGGATGTGAGTACTGCTGTAGTCTGGTATCAACAAAACCAGGGCAATTCCCT
 AAAACTACTGATTTACTGGGCATCCACCCGGCACACTGGAGTCCCTGATGCCCTCACAGGCAGTGG
 TCTGGGACAGATTATACTCTCACCACATCAGCAGTGTGCAGGCTGAAGACCTGGCACTTATTACTGT
 CAGCAACATTATACCACTCCGTACACGTTGGAGGGGGACCAAGCTGAAATAAACGGGCTGAT
 GCTGCACCAACTGTATCC

F26G10-VL

GGGCCAGCCGGCGAGCTGACATTCTGATGACCCAGTCTCACAAATTATGTCCACATCAGTAG
 GAGACAGGGTCAGCATCACCTGCAAGGCCAGTCAGGATGTGAGTACTGCTGTAGCCTGGTATCAAC
 AAAAACAGGGCAATCTCTAAACTACTGATTTACTGGGCATCCACCCGGCACACTGGAGTCCCTG
 ATCGCTTCACAGGCAGTGGATCTGGGACAGATTATACTCTCACCACATCAGCAGTGTGCAGGCTGAAG
 ACCTGGCACTTATTACTGTCAACATTATAGCACTCCGTACACGTTGGAGGGGGACCAAGC
 TGGAAATAAACGGGCTGATGCTGCACCAACTGTATCC

F26G18-VL

GAGCTCGTATGACCCAGTCTCCATCCTCCTGTCTGCCTCTGGGAGACAGAGTCACCATCAGT
 TGCAAGGCCAGTCAGGACATTAGCAATTATTAAACTGGTATCAGCAGAAACCAGATGGAACATGTT
 AAACTCCTGATCTATTACACATCAAGATTACACGCAGGAGTCCCATCAAGGTTCAAGTGGCAGTGG
 TCTGGAACAGATTATTCTCTCACCATTAGCAACCTGGAGCAAGAAGATATTGCCACTTACTTTGC
 CAACAGGGTTATACGCTCCGTACACGTTGGAGGGGGACCAAGCTGAAATAAACGGGCTGAT
 GCTGCACCAACTGTATCCAA

F26G19-VL

GACATTCTGATGACCCAGTCTCCATCCTCCTTATCTGCCTCTGGGAGAAAGAGTCAGTCTCACT
 TGTCGGCAAGTCAGGAAATTAGTGGTTACTTAAGCTGGCTTCAGGAGAAACCAGATGGAACATATT
 AAACGCCCTGATCTACGCCGCTTCCACTTAAAGATTCTGGTGTCCAAAAGGTTCAAGTGGCAGTAGG
 TCTGGGTCAAGATTATTCTCTCACCACATCAGCAGCCTTGAGTCTGAAGATTTCAGACTATTACTGT
 CTACAATATGTTAGTTATCCGTGGACGTTGGAGGGACCAAGCTGAAATCAAACGGGCTGAT
 GCTGCACCAACTGTA

FIGURE 10-1

F26G1-VL

GTGCCAGATGTGAGCTCGTGTGATGACCCAGTCTCCAGTATCCATAACTGCATCTCGAGGGGAGAAGG
TCACCACCATCACCTGCCGTGCCAGCTCAAGTATAAGTCCAATTACTTACACTGGTACCAGCAGAAGC
CAGGATCCTCCCCTAAACCTTTGATTATAGGACATCCATCCTGGCATCTGGAGTCCTGGACACCT
TCAGTGGCAGTGGGTCTGAGAGCTTACACTCTGACAATCAGCTGCATGCAGGACGAAGTTGCTG
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ATAAAACGGGCTGATGCTGCACCAACTGTATCCA

F26G6-VL

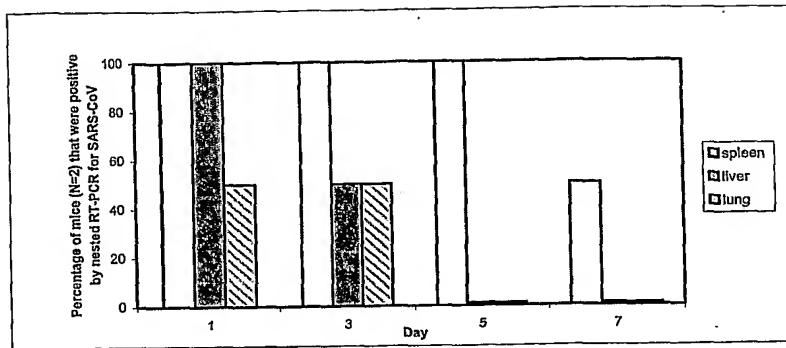
GTGCCAGATGTGAGCTCGTGTGATGACCCAGTCTCCAGCATTGATGATGATGAACTGGTACCAGCAGAAGGCAG
TCACCACCATCAGATGCATAAGCAGCACTGACATTGATGATGATGAACTGGTACCAGCAGAAGGCAG
GAAAACCTCCTAAACTCCTTATTCAGAAGGCAATATTTAGTCCTGGAGTCCCATTCCGATTCT
CCAGCAGTGGCAATGGCACAGATTGTTTACAGTTGAAAACACGCTCTCAGAAGATGTTGCAG
ATAACTACTGTTGCAAAGTGATAACATGCCATTACGTTCGGCTCGGGACAAAGTTGGAAATAA
AACGGGCTGATGCTGCACCAACTGTATCC

F26G8-VL

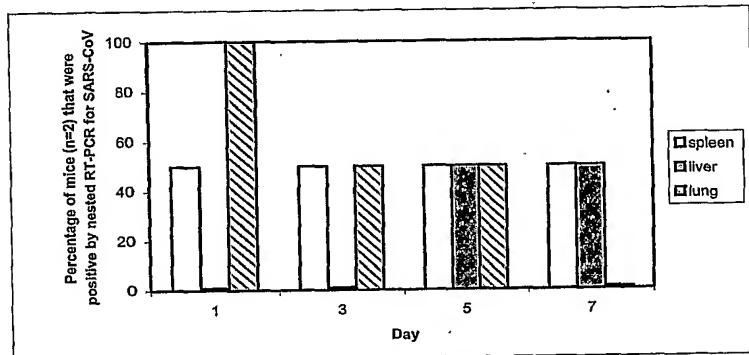
GTGCCAGATGTGAGCTCGTGTGATGACCCAGTCTCCAGCATTGATGATGATGAACTGGTACCAGCAGAAGGCAG
TCACCACCATCAGATGCATAAGCAACACTGACATTGATGATGATGAACTGGTACCAGCAGAAGGCAG
GAGAACCTCCTAAACTCCTTATTCAGAAGGCAATATTTAGTCCTGGAGTCCCATTCCGATTCT
CCAGCAGTGGCAATGGCACAGATTGTTTACAATTGAAAACACGCTCTCAGAAGATGTTGCAG
ATAACTACTGTTCAAAGTGATAACATGCCATTACGTTCGGCTCGGGACAAAGTTGGAAATAA
AACGGGCTGATGCTGCACCAACTGTATCC

Neutralizing mAbs are in **bold text**.

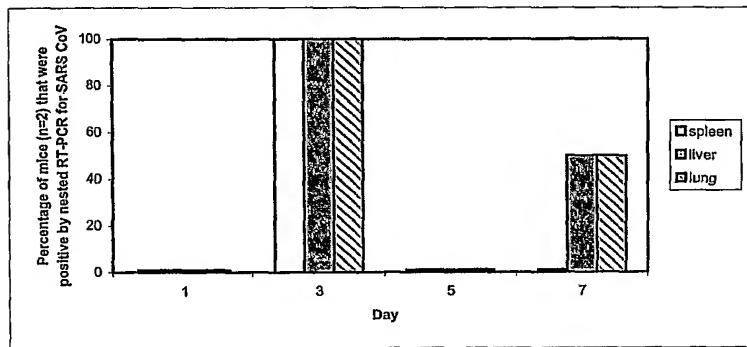
FIGURE 10-2



(A)

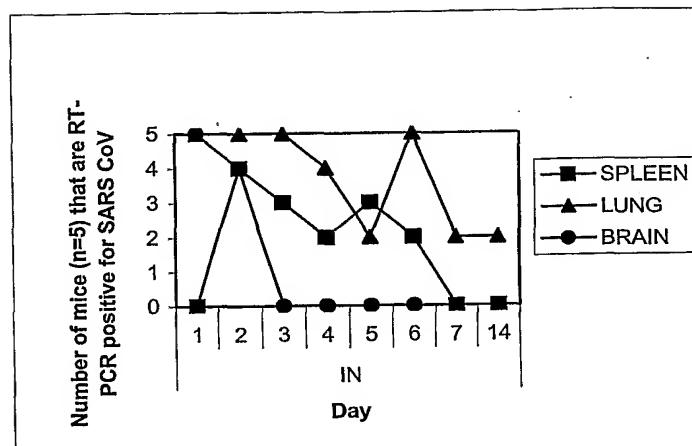


(B)

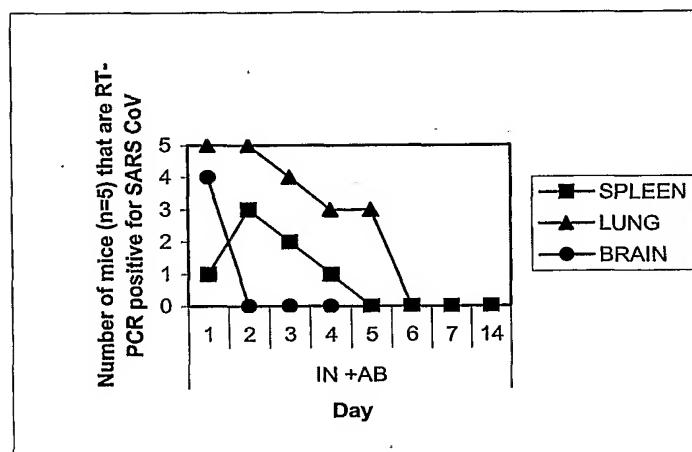


(C)

FIGURE 11



(A)



(B)

Figure 12

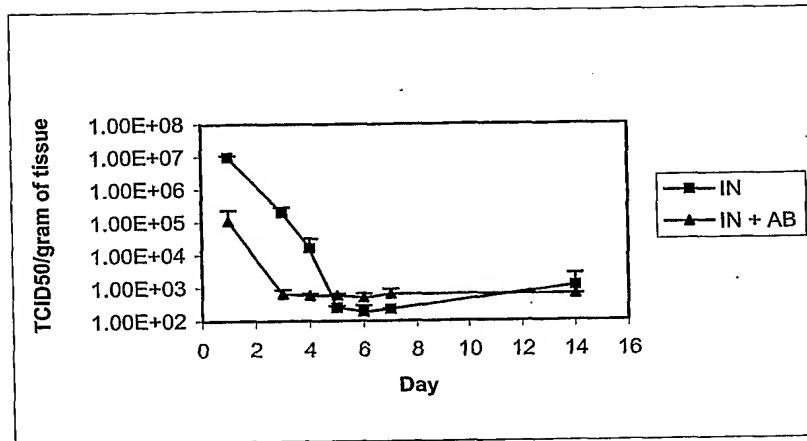


Figure 13